

Mission Control Software the open source way

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How can you develop a mission control center to support a mission involving 2 CubeSats? You don't develop it, you use YAMCS open source mission control software! At least that is what Libre Space Foundation did for its PHASMA mission and you should too.

In this talk i am gonna present how the LSF software team used YAMCS to create a working mission control center to send telecommands and receive telemetry from the PHASMA CubeSats. We are gonna dive in YAMCS XTCE loader to describe our CCSDS Space Packet and specific telecommands, in the creation of appropriate data links for TM&TC for CCSDS USLP packets, and we will even dabble in Java when we need to write our own command post processor. We will then send and receive our commands from the Web interface and examine the packets along with how erroneous ones are handled.

Author: MALYSHKINA, Victoria (Libre Space Foundation)

Co-author: SDOUKOS, Nestoras (Libre Space Foundation)

Presenter: MALYSHKINA, Victoria (Libre Space Foundation)

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